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IN THE ABSTRACT

Please replace the Abstract with the following:

An electronic device has a data communication bus (200) mounted on a semiconductor substrate (120). The data communication bus (200) has a first conductor (102), a second conductor (104), a third conductor (106) and a fourth conductor (108). The conductors have been reordered and the distances (dH₁, dH₂, dH₃) between two neighboring conductors have been recalculated on the basis of the correlation between the data-bits conveyed by the conductors of the data communication bus (200), e.g. the number of times that the two transitions on two conductors have a predetermined value out of the total number of transitions on that conductor pair. Consequently, a data communication bus (200) is obtained in which the power consumption resulting from the charging of the cross-coupling capacitance between two neighboring conductors is reduced.